Maine Geological Survey Coastal Marine Geology Intern 2022

Expected Intern Contributions: The 2022 Intern will aid the Marine Geology Division of the Maine Geological Survey in the Department of Agriculture, Conservation and Forestry with field and office efforts. The Intern will support: 1) field work for the Maine Beach Monitoring Program (MBMAP) and State of Maine Beach Profiling Program (SMBPP); 2) field work for nearshore mapping programs along Maine beaches; 3) field work for monitoring several living shoreline installations in Casco Bay; and 4) preparation of the 2022 State of Maine's Beaches report and participation in the 2022 Beaches Conference; and 5) other MGS project field and office efforts. The prospective Intern must be in a physical condition to spend several days per week in the field (at beaches, dunes, bluffs, and salt marsh areas). Field work will be concentrated in York, Cumberland, and Sagadahoc Counties, but may include others. The prospective Intern must be capable of walking several miles and spending long periods of time in the field carrying survey equipment, driving an MGS truck, and learning how to operate field equipment, including Real Time Kinematic GPS (RTK GPS) and the MGS Nearshore Survey System (NSS), a PWC-based survey platform. The Intern will be conducting field work in conjunction with MGS' Marine Geologists but will also work alone. The Intern will process and analyze collected field data in GIS, including bathymetric and Light Detection and Ranging (LIDAR) data. The Intern also will aid MGS with a variety of data-development and coastal resiliency efforts.

Experience and Knowledge Gained: The prospective Intern will gain experience and knowledge regarding MGS programs and work efforts, learn various coastal geologic field mapping, survey data processing and analysis techniques, and will become proficient in using a variety of different field equipment and software for field and office efforts, including:

- In-depth knowledge of Maine's beaches, their natural geology and anthropogenic features;
- Surveying techniques using a network Real Time Kinematic Global Position System (RTKGPS) and data processing
- Water-based survey techniques using the Nearshore Survey System (NSS), a PWC-based survey platform
- Displaying and analyzing GPS, beach profile, and other survey data within GIS
- LiDAR data processing, analysis, and interpretation (as needed)
- Knowledge of tidal elevation data and analysis using NOAA VDATUM software
- Living shoreline project design, construction and monitoring
- Working as part of a large, multi-agency project team
- Data analysis and presentation using Microsoft Excel, Word, and PowerPoint, etc.

Minimum Requirements: The prospective Intern will have the following minimum requirements:

- Completed *at least* their 3rd year in college with a major in geology, GIS, or related earth-sciences discipline
- Experience using ArcGIS software and the Microsoft Office suite of products
- Strong, independent work ethic and team skills
- A valid driver's license *free of violations*

Duration and compensation: We expect a **12 to 16 week (3 to 4 month)** internship with somewhat flexible start (typically in early to mid-May or early June) and end dates, depending on Intern availability. The Intern will receive **$15/hour** for a 40-hour week. Any field or work-related travel expenses will be reimbursed by the Maine Geological Survey. A state vehicle will be available for job-related travel. *Please note there are no relocation expenses, housing, health insurance, vacation, or state retirement benefits associated with this position.*

Application: Please include a *cover letter* describing relevant experience, a *resume*, and *contact information for at least one reference,* and your *available start and end dates.* **Applications are due by 5 pm on Friday, February 11th.** Please submit applications to:

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